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**Moriyama**

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(54) **PRINT TAPE AND TAPE PRINTER**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

5,803,635	A *	9/1998	Austin et al.	400/708
5,829,897	A *	11/1998	Murai	400/615.2
6,058,637	A *	5/2000	Duncan	40/633
7,726,893	B2 *	6/2010	Harada et al.	400/615.2
7,747,544	B2 *	6/2010	Cordery et al.	705/408
7,992,791	B2 *	8/2011	Fukui et al.	235/492
8,113,727	B2 *	2/2012	Niwa et al.	400/76
8,387,293	B2 *	3/2013	Wanibuchi	40/633
8,436,734	B2 *	5/2013	Kato et al.	340/572.8
8,561,331	B2 *	10/2013	Wanibuchi	40/633
2005/0002715	A1 *	1/2005	Fries et al.	400/88

(Continued)

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FOREIGN PATENT DOCUMENTS

JP	H09-240121	A	9/1997
JP	2005-022130	A	1/2005

(Continued)

OTHER PUBLICATIONS

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(52) **U.S. Cl.**

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See application file for complete search history.

(57)

**ABSTRACT**

A reverse surface of a print tape includes a reference portion and a non-reference portion. The reference portion is configured to identify a position of a print area. The non-reference portion includes a plurality of through holes. The reference portion includes a barcode that includes a first mark and a second mark. The non-reference portion includes at least one first area and a second area. The at least one first area and the second area are provided to obtain a color arrangement in which the non-reference portion does not include the barcode in the lengthwise direction, where it is assumed that each of the plurality of through holes is a portion indicating both a first color and a second color.

**19 Claims, 22 Drawing Sheets**

